Page 32, top of page: delete "CLAIMS" and insert the following heading:

<u>WHAT IS CLAIMED IS:</u>

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AMENDMENTS TO THE CLAIMS:

The following listing of claims supersedes all prior versions and listings of claims in this application:

1. (Currently Amended) A data network comprising<u>:</u>

a provider node, a receiver node, and a plurality of intermediate nodes,

the provider node being arranged to provide data to at least one of said intermediate nodes or to the receiver node,

said intermediate nodes being arranged to receive data and forward data to at least one other intermediate node or to the receiver node, and

the receiver node being arranged to receive data from at least one intermediate node or from the provider node;

wherein:

said data comprises at least a part which relates to a path ~~characterisation~~ <u>characterization</u> metric;

said provider node is arranged to assign an initial condition to the path ~~characterisation~~ <u>characterization</u> metric in respect of data provided by it;

said intermediate nodes are arranged to update the condition of the path ~~characterisation~~ <u>characterization</u> metric in respect of data they forward;

said receiver node is arranged to make available for the provider node

information indicative of a discrepancy between the condition of the path

~~characterisation~~ characterization metric in respect of data received by it and a

predetermined target condition for the path ~~characterisation~~ characterization metric; and

~~wherein~~

said provider node is arranged to assign a different initial condition to the path

~~characterisation~~ characterization metric in respect of subsequent data provided by it in

the event that it receives information indicative of such a discrepancy from said receiver

node.

2. (Currently Amended) A data network according to claim 1, wherein the

condition of the path ~~characterisation~~ characterization metric at a node is indicative of a

measure of congestion expected to be experienced by data on a path downstream of

that node.

3. (Currently Amended) A data network according to claim 1, wherein the

condition assigned to the path ~~characterisation~~ characterization metric is a value, and

the predetermined target condition is a value.

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4. (Currently Amended) A data network according to claim 1, wherein in the event that said provider node assigns a different initial condition to the path ~~characterisation~~ characterization metric in respect of subsequent data provided by it, said different initial condition is assigned such as to decrease a corresponding discrepancy in respect of said subsequent data received by said receiver node.

5. (Currently Amended) A data network according to claim 4, wherein said different initial condition is assigned such as to ~~maximise~~ maximize the possibility that said corresponding discrepancy in respect of said subsequent data received by said receiver node will be zero.

6. (Currently Amended) A data network according to claim 1, wherein an intermediate node is arranged to update the condition of the path ~~characterisation~~ characterization metric in response to a path characteristic associated with that node.

7. (Original) A data network according to claim 6, wherein said path characteristic relates to a measure of congestion on a path associated with that node.

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8. (Previously Presented) A data network according to claim 6 wherein said path characteristic relates to a measure of congestion on a path downstream of that node.

9. (Currently Amended) A method for assigning path ~~characterisation~~ characterization metrics to data in a data network comprising a provider node, a receiver node, and a plurality of intermediate nodes, the provider node being arranged to provide data to at least one of said intermediate nodes or to the receiver node, said data comprising at least a part which relates to a path ~~characterisation~~ characterization metric, said intermediate nodes being arranged to receive data and forward data to at least one other intermediate node or to the receiver node, and the receiver node being arranged to receive data from at least one intermediate node or from the provider node; the method comprising steps of:

assigning an initial condition to the path ~~characterisation~~ characterization metric in respect of data provided by the provider node;

updating the condition of the path ~~characterisation~~ characterization metric in respect of data forwarded by said intermediate nodes;

monitoring a final condition of the path ~~characterisation~~ characterization metric in respect of data received by the receiver node, and determining a measure indicative of

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a discrepancy between said final condition and a predetermined target condition for the

path ~~characterisation~~ <u>characterization</u> metric; and

assigning a different initial condition to the path ~~characterisation~~ <u>characterization</u>

metric in respect of subsequent data provided by the provider node in the event that

said measure indicates such a discrepancy in respect of previous data.

10. (Currently Amended) A method according to claim 9, wherein the condition

assigned to the path ~~characterisation~~ <u>characterization</u> metric is a value, and the

predetermined target condition is a value.

11. (Currently Amended) A feedback node for enabling an initial condition to be

assigned to a path ~~characterisation~~ <u>characterization</u> metric in respect of data to be

forwarded through a data network, said data network comprising a provider node, a

receiver node and a plurality of intermediate nodes, said data comprising at least a part

which relates to a path ~~characterisation~~ <u>characterization</u> metric; said provider node

being arranged to assign an initial condition to the path ~~characterisation~~ <u>characterization</u>

metric in respect of data, and to provide said data to at least one of said intermediate

nodes or to the receiver node; said intermediate nodes being arranged to receive data

from said provider node or from one or more other intermediate nodes, to update a

condition of the path ~~characterisation~~ <u>characterization</u> metric in respect of data received

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by them, and to forward data to at least one other intermediate node or to the receiver

node; and said receiver node being arranged to receive data from at least one

intermediate node or from the provider node, and to make available for the feedback

node information relating to the path ~~characterisation~~ characterization metric in respect

of data received by it, said feedback node comprising: ~~; wherein~~

~~the feedback node is~~ at least one message processor arranged to enable a

different initial condition to be assigned to the path ~~characterisation~~ characterization

metric in respect of subsequent data provided by the provider node in the event that

said feedback node receives information indicative of a discrepancy between a

predetermined target condition for the path ~~characterisation~~ characterization metric and

the condition of the path ~~characterisation~~ characterization metric in respect of previous

data received by said receiver node.

12. (Currently Amended) A feedback node according to claim 11, wherein the

condition assigned to the path ~~characterisation~~ characterization metric is a value, and

the predetermined target condition is a value.

13. (Currently Amended) A feedback node according to claim 11, wherein in the

event that a different initial condition is assigned to the path ~~characterisation~~

characterization metric in respect of subsequent data, said different initial condition is

assigned such as to decrease a corresponding discrepancy in respect of said

subsequent data received by said receiver node.

14. (Previously Presented) A feedback node according to claim 11, said

feedback node also serving as said provider node in said network.

15. (Currently Amended) A feedback node according to claim 14, said feedback

node being arranged to assign a different initial condition to the path ~~characterisation~~

characterization metric in respect of subsequent data in the event that it receives, from

said receiver node, a measure of a discrepancy between said predetermined target

condition for the path ~~characterisation~~ characterization metric and the condition of the

path ~~characterisation~~ characterization metric in respect of previous data received by

said receiver node.

16. (Currently Amended) A feedback node according to claim 14, said feedback

node being arranged to assign a different initial condition to the path ~~characterisation~~

characterization metric in respect of subsequent data in the event that it receives, from

said receiver node, information indicative of the condition of the path ~~characterisation~~

characterization metric in respect of previous data received by said receiver node, and

determines that there is a discrepancy between said condition of the path

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~~characterisation~~ characterization metric and said predetermined target condition for the path ~~characterisation~~ characterization metric.

17. (Previously Presented) A feedback node according to claim 11, said feedback node also serving as said receiver node in said network.

18. (Currently Amended) A feedback node according to claim 17, said feedback node being arranged to make available for the provider node a measure of a discrepancy between said predetermined target condition for the path ~~characterisation~~ characterization metric and the condition of the path ~~characterisation~~ characterization metric in respect of previous data received by said receiver node, whereby to enable said provider node to assign a different initial condition to the path ~~characterisation~~ characterization metric in respect of subsequent data.

19. (Currently Amended) A feedback node according to claim 17, said feedback node being arranged to make available for the provider node information indicative of the condition of the path ~~characterisation~~ characterization metric in respect of previous data received by said receiver node, whereby to enable said provider node to assign a different initial condition to the path ~~characterisation~~ characterization metric in respect of subsequent data in the event that said provider node determines that there is a

discrepancy between said condition of the path ~~characterisation~~ characterization metric

and said predetermined target condition for the path ~~characterisation~~ characterization

metric.

20. (Currently Amended) A method of providing data in a data network

comprising a provider node, a receiver node and a plurality of intermediate nodes, the

provider node being arranged to provide data to at least one of said intermediate nodes

or to the receiver node, said data comprising at least a part which relates to a path

~~characterisation~~ characterization metric; said intermediate nodes being arranged to

receive data from said provider node or from one or more other intermediate nodes, to

update a condition of the path ~~characterisation~~ characterization metric in respect of data

received by them, and to forward data to at least one other intermediate node or to the

receiver node; and said receiver node being arranged to receive data from at least one

intermediate node or from the provider node, and to make available for the provider

node information indicative of a discrepancy between an eventual condition of the path

~~characterisation~~ characterization metric in respect of data received by it and a

predetermined target condition for the path ~~characterisation~~ characterization metric; the

method comprising ~~the steps of~~:

assigning an initial condition to the path ~~characterisation~~ characterization metric

in respect of data;

providing said data to at least one of said intermediate nodes;

receiving information relating to said eventual condition of the path

~~characterisation~~ characterization metric in respect of previously-provided data received

by said receiver node; and

assigning a different initial condition to the path ~~characterisation~~ characterization

metric in respect of subsequent data in the event of receipt of information indicative of a

discrepancy between said eventual condition of the path ~~characterisation~~

characterization metric and a predetermined target condition for the path

~~characterisation~~ characterization metric.

21. (Currently Amended) A method according to claim 20, wherein the condition

assigned to the path ~~characterisation~~ characterization metric is a value, and the

predetermined target condition is a value.

22. (Currently Amended) A method according to claim 20, said receiver node

being arranged to make available for the provider node a measure of a discrepancy

between said predetermined target condition for the path ~~characterisation~~

characterization metric and said eventual condition of the path ~~characterisation~~

characterization metric in respect of previous data received, whereby to enable said

provider node to assign a different initial condition to the path ~~characterisation~~ characterization metric in respect of subsequent data.

23. (Currently Amended) A method according to claim 20, said receiver node being arranged to make available for the provider node information indicative of the condition of said eventual path ~~characterisation~~ characterization metric in respect of previously received data, whereby to enable said provider node to assign a different initial condition to the path ~~characterisation~~ characterization metric in respect of subsequent data in the event that said provider node determines that there is a discrepancy between said condition of the path ~~characterisation~~ characterization metric and said predetermined target condition for the path ~~characterisation~~ characterization metric.

24. (Currently Amended) A method for providing path ~~characterisation~~ characterization information for nodes in a network, said network comprising a plurality of nodes including a provider node, a receiver node, and at least one intermediate node, the provider node being arranged to provide data to at least one intermediate node or to the receiver node, an intermediate node being arranged to receive data and to forward data to at least one other intermediate node or to the receiver node, and the receiver

node being arranged to receive data from the provider node or from at least one intermediate node; the method comprising ~~steps of~~:

assigning an initial condition to a path ~~characterisation~~ characterization metric in the event that said provider node provides data, said path ~~characterisation~~ characterization metric being associated with said data;

updating the condition of the path ~~characterisation~~ characterization metric in the event that an intermediate node receives said data;

determining an eventual condition of the path ~~characterisation~~ characterization metric in the event that said receiver node receives said data; and

establishing if a discrepancy exists between the eventual condition of the path ~~characterisation~~ characterization metric and a predetermined target condition;

wherein, in the event that it is established that a discrepancy does exist between said eventual condition and said predetermined target condition, said method further comprises ~~steps of~~:

assigning a different initial condition to a further path ~~characterisation~~ characterization metric in the event that said provider node subsequently provides further data, said further path ~~characterisation~~ characterization metric being associated with said further data;

updating the condition of said further path ~~characterisation~~ characterization metric in the event that an intermediate node receives said further data; and

making information indicative of said updated condition available to said

intermediate node.

25. (Currently Amended) A method according to claim 24, wherein the condition

assigned to the path ~~characterisation~~ characterization metric is a value, and the

predetermined target condition is a value.

26. (Currently Amended) A method for providing path ~~characterisation~~

characterization information for nodes in a network, said network comprising a plurality

of nodes including a provider node, a receiver node, and at least one intermediate node,

the provider node being arranged to provide data to at least one intermediate node or to

the receiver node, an intermediate node being arranged to receive data and to forward

data to at least one other intermediate node or to the receiver node, and the receiver

node being arranged to receive data from the provider node or from at least one

intermediate node; the method comprising ~~steps of~~:

assigning an initial condition to a path ~~characterisation~~ characterization metric in

the event that said provider node provides data, said path ~~characterisation~~

characterization metric being associated with said data;

updating the condition of the path ~~characterisation~~ characterization metric in the

event that an intermediate node receives said data;

determining an eventual condition of the path ~~characterisation~~ characterization

metric in the event that said receiver node receives said data; and

establishing if a discrepancy exists between the eventual condition of the path

~~characterisation~~ characterization metric and a predetermined target condition;

wherein, in the event that it is established that a discrepancy does exist between

said eventual condition and said predetermined target condition, said method further

comprises ~~steps of~~:

assigning an initial condition to a further path ~~characterisation~~ characterization

metric in the event that said provider node subsequently provides further data, said

further path ~~characterisation~~ characterization metric being associated with said further

data;

updating the condition of said further path ~~characterisation~~ characterization

metric in the event that an intermediate node receives said further data;

making information indicative of said updated condition available to said

intermediate node; and

making information relating to the discrepancy between the eventual condition of

a previous path ~~characterisation~~ characterization metric and said predetermined target

condition available to said intermediate node.

27. (Currently Amended) A method according to claim 26, wherein the condition

assigned to the path ~~characterisation~~ characterization metric is a value, and the

predetermined target condition is a value.

28. (Currently Amended) A path ~~characterisation~~ characterization system for

providing path ~~characterisation~~ characterization information in association with a data

network, said data network comprising a plurality of nodes including a provider node, a

receiver node, and at least one intermediate node, the provider node being arranged to

provide data to at least one intermediate node or to the receiver node, an intermediate

node being arranged to receive data and to forward data to at least one other

intermediate node or to the receiver node, and the receiver node being arranged to

receive data from the provider node or from at least one intermediate node; the path

~~characterisation~~ characterization system comprising:

a path ~~characterisation~~ characterization metric condition assigning means,

associated with the provider node, arranged to assign an initial condition to a path

~~characterisation~~ characterization metric in the event that said provider node provides

data;

a path ~~characterisation~~ characterization metric updating means, associated with

an intermediate node, arranged to update the condition of the path ~~characterisation~~

characterization metric in the event that said node receives data; and

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a path ~~characterisation~~ characterization metric feedback means, associated with

the receiver node, arranged to determine an eventual condition of the path

~~characterisation~~ characterization metric in the event that said receiver node receives

said data, and to make available for the path ~~characterisation~~ characterization metric

condition assigning means information indicative of a discrepancy between the eventual

condition of the path ~~characterisation~~ characterization metric and a predetermined

target condition for the path ~~characterisation~~ characterization metric; wherein

said path ~~characterisation~~ characterization metric condition assigning means is

arranged to assign a different initial condition to a path ~~characterisation~~ characterization

metric associated with subsequent data in the event that feedback is made available

indicative of such a discrepancy between the eventual condition of the path

~~characterisation~~ characterization metric and the predetermined target condition in

relation to a previous path ~~characterisation~~ characterization metric.

29. (Currently Amended) A path ~~characterisation~~ characterization system

according to claim 28, wherein the condition assigned to the path ~~characterisation~~

characterization metric is a value, and the predetermined target condition is a value.

30. (Currently Amended) A path ~~characterisation~~ characterization system for

providing path ~~characterisation~~ characterization information in association with a data

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network, said data network comprising a plurality of nodes including a provider node, a receiver node, and at least one intermediate node, the provider node being arranged to provide data to at least one intermediate node or to the receiver node, an intermediate node being arranged to receive data and to forward data to at least one other intermediate node or to the receiver node, and the receiver node being arranged to receive data from the provider node or from at least one intermediate node; the path ~~characterisation~~ characterization system comprising:

a path ~~characterisation~~ characterization metric condition assigning means, associated with the provider node, arranged to assign a path ~~characterisation~~ characterization metric with an initial condition in the event that said provider node provides data, said path ~~characterisation~~ characterization metric being associated with said data;

a path ~~characterisation~~ characterization metric updating means, associated with a node capable of receiving data, arranged to update the condition of the path ~~characterisation~~ characterization metric in the event that said node receives data; and

a path ~~characterisation~~ characterization metric feedback means, associated with the receiver node, arranged to determine an eventual condition of the path ~~characterisation~~ characterization metric in the event that said receiver node receives said data, and to make available for the path ~~characterisation~~ characterization metric

condition assigning means information relating to the eventual condition of the path ~~characterisation~~ characterization metric; wherein

said path ~~characterisation~~ characterization metric condition assigning means is arranged to provide information relating to the eventual condition of the path ~~characterisation~~ characterization metric associated with previous data in the event that feedback is made available indicative of [[such]] a discrepancy between the eventual condition of the path ~~characterisation~~ characterization metric and [[the]] a predetermined target condition in relation to a previous path ~~characterisation~~ characterization metric.

31. (Currently Amended) A path ~~characterisation~~ characterization system according to claim 30, wherein the condition assigned to the path ~~characterisation~~ characterization metric is a value, and the predetermined target condition is a value.

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